

REMARKS

In the Office Action mailed March 21, 2002, claims 23-44 are held subject to a restriction requirement, the Examiner contending that the claims are directed to more than one invention as follows:

- ◆ Group I – claims 23-30, 34 and 40, which the Examiner contends are directed to nucleic acids;
- ◆ Group II - claims 31-33, which the Examiner contends are directed to polypeptides;
- ◆ Group III – claim 35, which the Examiner contends is directed to an antibody;
- ◆ Group IV - claims 36-39, which the Examiner contends are directed to a transgenic animal and method of making it;
- ◆ Group V - claim 41, which the Examiner contends is directed to a promoter;
- ◆ Group VI - claims 42 and 43, which the Examiner contends are directed to methods of screening compounds which alter conductive properties; and
- ◆ Group VII – claim 44, which the Examiner contends is directed to methods of screening compounds which alter genetic expression.

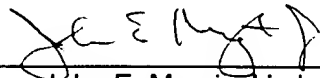
Applicants herein elect the claims of Group VI, claims 42 and 43, without traverse and therefore cancel claims 23-41 and 44. Applicants reserve the right to file divisional applications to the non-elected subject matter.

Conclusion

Applicants have cancelled claims 23-41 and 44, amended claims 42 and 43 and added claim 45. Applicants contend that such amendment adds no new matter and finds support in the specification. Attached hereto, please find pages captioned "Version with markings to show changes made."

Applicants submit that the instant application is in condition for allowance. Accordingly, early examination and a Notice of Allowance are respectfully requested for claims 42, 43 and 45. If the Examiner is of the opinion that the instant application is in condition for other than allowance, he is requested to contact the applicants' Attorney at the telephone number given below so that additional changes may be discussed.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE.

IN THE CLAIMS:

Please cancel claims 23-41 and 44 without prejudice.

Please amend the claims as follows:

42. (Amended) A method of [finding new active] determining a compound[s] which alter[ing the]s at least one [conductive] propert[ies]y of an acetylcholine receptor[s] comprising a polypeptide encoded by a nucleic acid having a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above, or alters at least one property of a polypeptide exerting the biological function of an acetylcholine receptor β subunit and comprising an amino acid sequence having at least 40% identity to SEQ ID NO: 2, [according to Claim 33] the compound useful for crop protection and/or pharmaceutical [active compounds for the] treatment of humans, the method comprising [the steps of]:

[(a) providing a host cell according to Claim 26,]

[(b)] culturing [the host cell] in the presence of the at least one compound [or of a mixture of compounds,] a host cell stably transfected or transformed with a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above or a vector comprising an isolated and purified nucleic acid molecule as defined above, and

[(c)] detecting the at least one altered [conductive] proper[ies]y of the receptor.

43. (Amended) A method of [finding]determining a compound specifically binding to [the] an acetylcholine receptor [of Claim 33,]comprising a polypeptide encoded by a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above, or a polypeptide exerting the biological function of an acetylcholine receptor β subunit and comprising an amino acid sequence having at least 40% identity to SEQ ID NO:2, the method comprising [the steps of]:

[(a)] contacting]exposing a host cell stably transfected or transformed with a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above or a vector comprising an isolated and purified nucleic acid molecule as defined above,

or

exposing a polypeptide encoded by a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which

are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above or a polypeptide exerting the biological function of an acetylcholine receptor β subunit and comprising an amino acid sequence having at least 40% identity to SEQ ID NO: 2,

or

exposing an acetylcholine receptor comprising a polypeptide encoded by a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NO: 1, subsequences of SEQ ID NO: 1 which are at least 14 base pairs in length, sequences which hybridize with SEQ ID NO: 1, sequences which have at least 70% identity to the sequence between position 43 and position 1368 of SEQ ID NO: 1, sequences which are complementary to SEQ ID NO: 1, and sequences which, owing to the degeneracy of the genetic code, encode the same amino acid sequence as do the sequences defined above or an acetylcholine receptor comprising a polypeptide exerting the biological function of an acetylcholine receptor β subunit and comprising an amino acid sequence having at least 40% identity to SEQ ID NO: 2, [selected from:

- a host cell of Claim 26,
- a polypeptide according to Claim 31 or 32, and
- a receptor according to Claim 33,

with] to at least one compound [or a mixture of compounds] under at least one condition[s which allow] permitting the interaction of the at least one compound with the host cell, the polypeptide or the receptor, and

[(b) determining]identifying the compound[(s) which bind(s)] specifically binding to the receptor[s].

Claim 45 has been added.